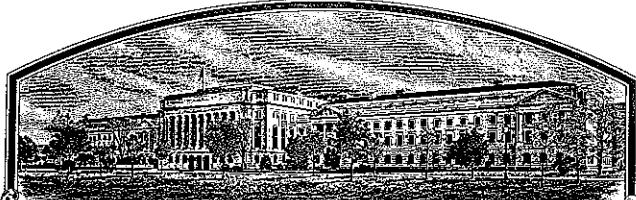


No.

9800020



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Western Plant Breeders

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREBUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.  
NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF Viable BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN BREEDING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, DURUM

'Mohawk'

In Testimony Whereof, I have hereunto set my hand  
and caused the seal of the Plant Variety  
Protection Office to be affixed at the City of  
Washington, D.C. this thirty-first day of March,  
in the year of our Lord two thousand.

Attest:



Anne Marie Show

Commissioner  
Plant Variety Protection Office  
Anne M. Show

Dan Glickman

Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions.

FORM APPROVED - OMB NO. 0581-00

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)

Western Plant Breeders, Inc.

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

8111 Timberline Drive  
Bozeman, MT 59715

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

PH888-219

3. VARIETY NAME

Mohawk

FOR OFFICIAL USE ONLY

PVPO NUMBER

9800020

FILING DATE

Nov. 3, 99

FILING AND EXAMINATION FEE:

\$ 2450.00

DATE

11/3/99

CERTIFICATION FEE:

\$ 300

DATE

1-19-00

7. GENUS AND SPECIES NAME

Triticum durum

8. FAMILY NAME (Botanical)

Gramineae

9. CROP KIND NAME (Common name)

Durum Wheat

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)

Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

Arizona

12. DATE OF INCORPORATION

08/24/90

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Kim C. Shantz

Western Plant Breeders, Inc.  
P.O. Box 6904, 1661 E. 20th Street  
Yuma, AZ 85366

14. TELEPHONE (Include area code)

(520) 782-2749

15. FAX (Include area code)

(520) 782-2751

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- Exhibit A. Origin and Breeding History of the Variety
- Exhibit B. Statement of Distinctness
- Exhibit C. Objective Description of the Variety
- Exhibit D. Additional Description of the Variety (Optional)
- Exhibit E. Statement of the Basis of the Applicant's Ownership
- Voucher Sample (2,600 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)
- Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)

YES If "yes," answer items 18 and 19 below!

NO If "no," go to item 20!

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

YES       NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

FOUNDATION     REGISTERED     CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

YES If "yes," give names of countries and dates!

NO

December 2, 1996

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is/are the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is/are informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s))

NAME (Please print or type)

Kim C. Shantz  
Wheat Breeder

DATE

10/20/97

SIGNATURE OF APPLICANT (Owner(s))

NAME (Please print or type)

Dan R. Biggerstaff  
General Manager

DATE

10/24/97

#### Exhibit A. Origin and Breeding History of the Variety

**MOHAWK** is a spring durum wheat selected from a Western Plant Breeders generated composite cross designated PH883-22 alpha-85 made in 1985. PH883-22 alpha-85 was formed by crossing PH883-22 with the following advanced high quality durum lines: WestBred 881, WestBred 1000D, WestBred Turbo, Imperial, Aldura, Mexicali, Yavaros 79, Mallard 'S', Swan 'S', Kingfisher 'S', Mesavaria, Durati, Modoc, WAWA 'S', and Rokel. PH883-22 was derived from the composite cross SDP-80/WestBred 881. SDP-80 was derived from crossing F2 plants in SDP-79 with the following lines: WestBred 803, WestBred 1000D, Mexicali, Aldura, Calvin, Yavaros 79, Valnova, Mida, and WestBred 881. The crosses were all bulked together in the F1. SDP-79 was derived from crossing WestBred 1000D and Mexicali with the following lines: Calvin, Edmore, Bitterin 'S', Gerado 512, Gerado 572, and Gerado 532. The crosses were all bulked together in the F1.

Thirty (30) crosses, designated PH883-22 alpha-85, were bulked together and the F1 was grown in Bozeman, MT in 1985. Two generations were grown each year and the F4 head rows were planted at Phoenix, AZ in 1987. Head selections were made from selected rows and were grown as F5 rows at Phoenix in 1988. One row designated PH888-219 was harvested in bulk and yield tested in the desert durum area in 1989 through 1995. In 1992 thirty-two spikes were selected and grown as head rows at Phoenix, AZ in 1993. Fifteen (15) uniform nonsegregating rows were selected and grown as head row plots at Bozeman, MT in 1993. Twelve (12) head row plots that were found to be uniform, were bulked together to form breeder seed. The resulting breeders seed was planted at Yuma, AZ in 1994. Foundation seed was then produced at Yuma in 1995. A variant that is 10 cm to 30 cm taller occurs at a frequency of up to .03% and a white awned variant occurs at a frequency of up to .05%.

Mohawk has been uniform and stable in agronomic appearance and performance across six generations. Agronomic data to support stability is presented in the tables. The selection criteria used during the breeding of Mohawk were as follows:

- F1 None, bulk harvest
- F2 Large spikes, semidwarf growth habit, and robust plants
- F3 None, random harvest
- F4 Visual high yield rows; semidwarf growth habit, flowering date, % protein, S.D. S., sedimentation, semolina color, test weight, and lodging resistance.
- F5 Same as F4

**Exhibit B. Statement of Distinctness.**

MOHAWK is a day length insensitive spring durum wheat with an average plant height of 89 cm, which is 7 centimeters shorter than WestBred Turbo. MOHAWK most resembles WestBred 881 but differs in that it has black awns whereas WestBred 881 has white awns. The green flag leaf at booting is erect and not twisted with waxy bloom. The penultimate leaf is wide, long and pubescence with white auricles. The stems are white, hollow and waxy. The spikes are midlong, midwide, oblong, dense with long black awns. The glumes are white, long, and wide with narrow oblique shoulders. The beaks are wide, medium long and acuminate. Pubescence of the glume is heavy. MOHAWK has long wide seeds that have an elliptical shape. The brush size is medium size but short. The seed has rounded cheeks with narrow shallow creases. The germ size is large.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT  
(Wheat)

**OBJECTIVE DESCRIPTION OF VARIETY**  
**WHEAT (*Triticum spp.*)**

NAME OF APPLICANT(S)  Western Plant Breeders, Inc.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)  8111 Timberline Drive Bozeman, MT 59715	PVPO NUMBER  9800020
VARIETY NAME  Mohawk	TEMPORARY OR EXPERIMENTAL DESIGNATION

**PLEASE READ ALL INSTRUCTIONS CAREFULLY:** Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g.   or ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: \_\_\_\_\_  
Please answer all questions for your variety; lack of response may delay progress of your application.

**1. KIND:**

2

1=Common      2=Durum      3=Club      4=Other (SPECIFY) \_\_\_\_\_

**2. VERNALIZATION:**

1

1=Spring      2=Winter      3=Other (SPECIFY) \_\_\_\_\_

**3. COLEOPTILE ANTHOCYANIN:**

1

1=Absent      2=Present

**4. JUVENILE PLANT GROWTH:**

2

1=Prostrate      2=Semi-erect      3=Erect

**5. PLANT COLOR (boot stage):**

2

1 = Yellow-Green      2 = Green      3 = Blue-Green

**6. FLAG LEAF (boot stage):**

1

1 = Erect      2 = Recurved

1

1 = Not Twisted      2 = Twisted

**7. EAR EMERGENCE:**

0     7

Number of Days Earlier Than \_\_\_\_\_ WestBred Turbo \*

0

Number of Days Later Than \_\_\_\_\_ WestBred 881 \*

**8. ANTER COLOR:**

1

1 = YELLOW      2 = PURPLE

**9. PLANT HEIGHT (from soil to top of head, excluding awns):**

5

cm Taller Than \_\_\_\_\_ Aldura \*

7

cm Shorter Than \_\_\_\_\_ WestBred Turbo \*

## 10. STEM:

## A. ANTHOCYANIN

 1

1=Absent

2=Present

## B. WAXY BLOOM

 2

1=Absent

2=Present

## C. HAIRINESS (last internode of rachis)

 1

1=Absent

2=Present

## D. INTERNODE (SPECIFY NUMBER)

 1

1=Hollow

2=Semi-solid

3=Solid

## E. PEDUNCLE

 2

1=Absent

2=Present

cm Length

## 11. HEAD (at Maturity):

## A. DENSITY

 3

1=Lax

2=Middense

3=Dense

## B. SHAPE

 2

1=Tapering

2=Strap

3=Clavate

4=Other (SPECIFY)

## C. CURVATURE

 2

1=Erect

2=Inclined

3=Recurved

## D. AWNEDNESS

 4

1=Awnless

2=Apically Awnletted

3=Awnletted

4=Awned

## 12. GLUMES (at Maturity):

## A. COLOR

 1

1=White

2=Tan

3=Other (SPECIFY)

## B. SHOULDER

 2

1=Wanting

2=Oblique

3=Rounded

4=Square

5=Elevated

6=Apiculate

## C. BEAK

 3

1=Obtuse

2=Acute

3=Acuminate

## D. LENGTH

 3

1=Short (ca. 7mm)

2=Medium (ca. 8mm)

3=Long (ca. 9mm)

## E. WIDTH

 3

1=Narrow (ca. 3mm)

2=Medium (ca. 3.5mm)

3=Wide (ca. 4mm)

## 13. SEED:

## A. SHAPE

 3

1=Ovate

2=Oval

3=Elliptical

## B. CHEEK

 1

1=Rounded

2=Angular

## C. BRUSH

 2

1=Short

2=Medium

3=Long

 1

1=Not Collared

2=Collared

## D. CREASE

 1

1=Width 60% or less of Kernel

2=Width 80% or less of Kernel

3=Width Nearly as Wide as Kernel

 1

1=Depth 20% or less of Kernel

2=Depth 35% or less of Kernel

3=Depth 50% or less of Kernel

## 13. SEED: (continued)

## E. COLOR

 2

1 = White

2 = Amber

3 = Red

4 = Other (SPECIFY) \_\_\_\_\_

## F. TEXTURE

 1

1=Hard

2=Soft

## G. PHENOL REACTION (see instructions):

1 = Ivory

2 = Fawn

3 = Light Brown

4 = Dark Brown

5 = Black

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14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)  
PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTEDStem Rust (*Puccinia graminis f. sp. tritici*) 0Stripe Rust (*Puccinia striiformis*) 0Tan Spot (*Pyrenophora tritici-repentis*) 0Halo Spot (*Selenophoma donacis*) 0

## Septoria nodorum (Glume Blotch)

 0

## Septoria avenae (Speckled Leaf Disease)

 0

## Septoria tritici (Speckled Leaf Blotch)

 0Scab (*Fusarium spp.*) 0

## "Black Point" (Kernel Smudge)

 4

## Barley Yellow Dwarf Virus (BYDV)

 0

## Soilborne Mosaic Virus (SBMV)

 0

## Wheat Yellow (Spindle Streak) Mosaic Virus

 0

## Wheat Streak Mosaic Virus (WSMV)

 0

## Other (SPECIFY) \_\_\_\_\_

## Other (SPECIFY) \_\_\_\_\_

## Other (SPECIFY) \_\_\_\_\_

Leaf Rust (*Puccinia recondita f. sp. tritici*) 0Loose Smut (*Ustilago tritici*) 0Flag Smut (*Urocystis agropyri*) 0Common Bunt (*Tilletia tritici* or *T. laevis*) 0Dwarf Bunt (*Tilletia controversa*) 0Karnal Bunt (*Tilletia indica*) 4Powdery Mildew (*Erysiphe graminis f. sp. tritici*) 0

## "Snow Molds"

 0Common Root Rot (*Fusarium, Cochliobolus* and *Bipolaris spp.*) 0Rhizoctonia Root Rot (*Rhizoctonia solani*) 0Black Chaff (*Xanthomonas campestris* pv. *translucens*) 0Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syringae*) 0

## Other (SPECIFY) \_\_\_\_\_

## Other (SPECIFY) \_\_\_\_\_

## Other (SPECIFY) \_\_\_\_\_

## Other (SPECIFY) \_\_\_\_\_

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

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Exhibit C (Wheat) Part

PLEASE SPECIFY BIOTYPE (where needed)

Hessian Fly (*Mayetiola destructor*)

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

Stem Sawfly (*Cephus* spp.)

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

Cereal Leaf Beetle (*Oulema melanopa*)

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

Russian Aphid (*Diuraphis noxia*)

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

Greenbug (*Schizaphis graminum*)

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

Aphids

0 \_\_\_\_\_

Other (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

*[Exhibit 3 AAA as of Dec 1999 as to that label]*

Table I. Yield in pounds per acre of MOHAWK and check varieties in Western Plant Breeders' trials.

Location	Year	WestBred MOHAWK	WestBred 881	Turbo	Aldura
Phoenix	1989	6093	6067	7014	5248
	1990	6299	5096	7697	6504
	1991	7296	6618	8934	7731
	1992	7868	6246	7578	7100
	1993	6939	5908	7188	6656
	1994	7344	7108	8341	7589
	1995	6782	4932	7815	6555
Phoenix Late	1990	5658	5504	5734	5146
	1991	7795	6912	8166	7305
	1992	5157	4593	4767	5482
	1993	7014	6400	7407	6784
	1994	6946	5963	7794	7705
	1995	6558	5106	6340	6534
El Centro	1990	6320	5547	6453	6400
	1991	--	--	--	--
	1992	5536	5122	6308	5400
	1993	--	--	--	--
	1994	7236	5650	8107	6834
	1995	6824	5614	7720	6389
San Joaquin	1990	7235	6582	8459	8976
	1991	7018	5469	8712	7817
	1993	6098	6205	6932	6990
	1994	6825	5974	6032	7134
Yuma	1991	7405	6062	8141	7575
	1992	6649	6097	7752	6678
	1993	6098	5266	6937	6810
	1994	5769	5734	6434	6554
	1995	6970	6534	8034	7006
Mean		6682	5858	7338	6804

Table II. % Protein of MOHAWK and check varieties in  
Western Plant Breeders' Trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1989	13.4	13.8	13.3	14.4
	1990	13.8	14.2	12.7	14.0
	1991	14.0	15.4	14.1	14.9
	1992	12.2	13.8	12.1	12.7
	1993	12.8	14.4	12.0	13.2
	1994	13.4	14.8	13.6	14.1
	1995	13.6	14.6	12.0	13.3
Phoenix Late	1990	13.1	13.1	13.5	14.2
	1991	13.9	14.8	13.4	14.6
	1992	14.6	15.6	14.7	14.3
	1993	12.9	14.1	12.9	12.3
	1994	12.9	13.6	11.5	13.3
	1995				
El Centro	1990	11.6	11.6	9.9	11.8
	1991	--	--	--	--
	1992	15.2	16.0	14.4	14.4
	1993	--	--	--	--
	1994	13.6	15.0	12.9	13.6
	1995	15.3	15.8	14.5	15.1
San Joaquin	1990	12.6	13.9	12.1	12.5
	1991	14.7	15.3	13.2	14.4
	1993	11.0	12.3	11.6	12.3
	1994	13.0	13.6	13.6	14.0
Yuma	1991	14.8	15.7	14.1	14.3
	1992	14.6	15.3	13.8	14.7
	1993	13.8	15.8	12.7	14.1
	1994	14.7	14.9	13.9	14.4
	1995	<u>13.9</u>	<u>15.4</u>	<u>12.5</u>	<u>13.8</u>
Mean		13.6	14.5	13.0	13.8

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Table III. Semolina Color of MOHAWK and check varieties of Western Plant Breeders' trials.\*

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1989	2.0	2.3	3.0	2.0
	1990	2.0	2.5	3.0	2.5
	1991	2.0	2.0	2.5	2.0
	1992	2.0	3.0	3.0	2.3
	1993	2.0	2.0	3.0	2.0
	1994	.8	2.0	3.0	1.5
	1995	1.0	2.0	3.0	2.0
Phoenix Late	1990	2.0	3.0	3.0	2.5
	1991	2.0	2.0	2.5	2.0
	1992	1.0	2.3	2.7	2.3
	1993	.8	2.3	3.0	2.0
	1994	.8	1.7	2.7	1.0
El Centro	1990	2.0	2.3	3.0	2.0
	1991	--	--	--	--
	1992	2.0	3.0	3.2	2.5
	1993	--	--	--	--
	1994	.5	2.0	2.7	2.0
	1995	.8	2.2	3.0	1.5
San Joaquin	1990	2.0	2.5	3.0	2.5
	1991	2.0	2.5	2.5	2.0
	1993	1.9	1.7	2.7	2.0
	1994	.5	1.5	2.7	1.5
Yuma	1991	2.0	2.0	3.0	2.5
	1992	2.0	2.7	3.0	2.7
	1993	.8	2.0	3.0	2.0
	1994	.8	2.0	2.7	1.5
	1995	.7	1.8	2.3	2.0
Mean		1.5	2.2	2.8	2.0

\*Subject slick color test

1=bright yellow

4=pale yellow

9800020

Table IV. SDS Sedimentation in mm of MOHAWK and check varieties in Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1989	32	34	29	23
	1990	32	33	27	22
	1991	31	36	30	21
	1992	32	33	29	21
	1993	38	42	32	19
	1994	37	39	34	21
	1995	46	53	40	24
Phoenix Late	1990	32	31	28	21
	1991	35	33	30	21
	1992	37	35	36	23
	1993	34	37	31	18
	1994	34	37	33	21
	1995				
El Centro	1990	32	35	29	19
	1991	—	—	—	—
	1992	35	36	36	22
	1993	—	—	—	—
	1994	43	51	39	21
	1995	42	47	38	26
San Joaquin	1990	33	36	30	21
	1991	36	38	32	22
	1993	46	49	42	20
	1994	38	41	34	20
Yuma	1991	34	34	32	21
	1992	33	36	33	22
	1993	38	42	34	20
	1994	33	38	32	21
	1995	43	45	42	26
Mean		36	39	33	21

9800020

Table V. Plant height in inches of MOHAWK and check varieties in Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1989	33	30	36	30
	1990	34	35	39	33
	1991	35	36	37	35
	1992	38	37	43	34
	1993	37	41	41	38
	1994	36	35	37	35
	1995	36	35	43	36
Phoenix Late	1990	31	34	35	32
	1991	34	36	40	34
	1992	39	38	42	35
	1993	35	34	38	32
	1994	--	--	--	--
	1995	38	39	38	35
El Centro	1990	32	32	33	32
	1991	--	--	--	--
	1992	39	37	37	31
	1993	--	--	--	--
	1994	37	36	37	32
San Joaquin	1990	33	37	37	33
	1991	36	39	39	33
	1993	34	35	36	32
	1994	31	32	32	27
Yuma	1991	35	36	38	35
	1992	<u>33</u>	<u>34</u>	<u>38</u>	<u>33</u>
Mean		35.0	35.6	37.9	33.2

Table VI. Days to heading after March 1 of MOHAWK and check varieties.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1989	14	14	27	18
	1990	23	21	30	28
	1991	27	27	34	34
	1993	23	22	33	26
	1994	27	27	33	31
	1995	25	24	35	24
Phoenix Late	1990	42	44	45	46
	1993	31	28	38	34
	1994	40	40	43	44
	1995	26	26	34	33
Mean		27.8	27.3	35.2	31.8

Table VII. % Lodging at Harvest of MOHAWK and check varieties in  
Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1990	83	50	70	80
	1991	35	3	63	0
	1992	43	17	63	17
	1993	42	1	66	0
	1994	—	—	—	—
	1995	50	40	7	0
Phoenix Late	1990	35	10	15	0
	1991	15	5	20	0
	1993	37	0	27	0
	1994	10	0	17	0
El Centro	1992	23	30	47	0
	1994	20	0	7	0
	1995	80	63	77	15
San Joaquin	1990	0	5	10	0
Yuma	1991	15	0	30	0
	1992	77	73	47	17
	1993	6	0	0	0
	1994	90	77	83	15
Mean		39	22	38	8

Table VIII. Test weight in lbs per bushel of MOHAWK and check varieties  
Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1990	61.7	62.8	63.9	63.4
	1991	63.5	61.3	63.9	64.0
	1992	61.5	60.3	61.9	62.9
	1993	62.7	63.1	63.2	63.8
	1994	61.5	61.0	62.0	62.9
	1995	63.4	63.1	64.2	65.2
Phoenix Late	1990	59.8	62.2	59.5	59.2
	1991	61.3	60.4	62.5	61.3
	1992	58.0	60.0	57.9	60.8
	1993	62.2	62.5	63.0	63.0
	1994	64.2	63.7	65.2	65.1
El Centro	1990	62.2	61.7	62.5	64.1
	1991	--	--	--	--
	1992	59.4	59.7	61.0	60.7
	1993	--	--	--	--
	1994	62.6	62.2	63.7	63.5
	1995	63.2	60.9	64.9	64.9
San Joaquin	1990	61.2	61.5	63.5	63.8
	1991	61.4	60.3	64.5	62.5
	1993	63.7	62.9	63.4	63.5
	1994	62.2	61.3	63.1	61.9
Yuma	1991	63.7	61.8	64.6	64.3
	1992	58.9	58.8	58.5	60.5
	1993	61.5	61.1	63.7	64.3
	1994	60.3	60.2	60.6	62.5
	1995	<u>64.0</u>	<u>61.7</u>	<u>64.0</u>	<u>64.1</u>
Mean		61.8	61.4	62.7	63.0

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Table IX. % HVAC of MOHAWK and check varieties of Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix Late	1993	98	99	95	94
	1994	93	99	85	96
	1995	66	80	27	18
El Centro	1990	87	76	36	78
San Joaquin	1993	94	92	94	91
Mean		88	89	67	75

Table X. % Black point of MOHAWK and check varieties of Western Plant Breeders' trials.

Location	Year	MOHAWK	WestBred 881	WestBred Turbo	Aldura
Phoenix	1992	23	34	11	35
	1993	6	19	1	12
	1994	0	9	9	4
El Centro	1990	15	24	36	43
	1991	16	23	21	35
	1992	13	33	7	22
Yuma	1992	23	26	55	47
	1993	29	54	32	35
	1994	21	27	32	28
	1995	33	47	17	23
Mean		18	30	22	28

Table XI. Pasta Quality of MOHAWK compared to WestBred 881 in Western Plant Breeders' trials from U.S.D.A. Durum Laboratory.

	<u>PH 888-219</u>			<u>WestBred 881</u>		
	1992 1)	1993 2)	1994 3)	1992	1993	1994
Test Weight	61.7	63.3	62.1	60.9	63.0	61.9
1000 K wt	48.5	55.6	50.8	47.1	60.2	53.7
Wht Ash	1.7	1.63	1.56	1.88	1.71	1.58
Wht Protein	14.5	12.6	12.1	15.4	13.9	13.1
Semolina Extr.	60.5	64.8	60.3	62.7	66.2	61.1
Specks	89	13	30	92	20	43
Semolina Ash	.75	.64	.64	.83	.68	.62
Dust Color	+2.0	7.5	+7.6	-2.6	7.0	7.2
Mixograph	5.5	6	4.7	7.5	8.0	4.3
Semolina Protein	13.3	11.3	10.9	14.6	12.6	11.5
Visual Color	+4.9	8.6	8.9	-1.2	7.8	8.4
Cooked Wt	31.1	33.5	30.0	29.6	31.0	31.2
Firmness	6.9	6.1	5.8	7.3	6.3	6.6
Residue	7.0	9.5	6.3	7.0	10.0	6.1
Score	4.0	3.0	2.7	4.0	4.0	3.3
Alveograph W P/L	289 3.9	175 1.8		275 3.8	221 1.6	

1) Average 2 locations

2) One Location

3) Average of 3 locations

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Table XII. Pasta Quality of MOHAWK compared to WestBred 881 in Western Plant Breeders' trials from Barilla Laboratory.

	<u>PH 888-219</u>				<u>WestBred 881</u>			
	1993 PHLate	1993 Phoenix	1994 PHLate	1994 Phoenix	1993 PHLate	1993 Phoenix	1994 PHLate	1994 Phoenix
Test Weight	84.4	84.8	86.6	84.4	84.4	84.6	86.2	83.3
Semolina Pro	13.5	14.9	13.2	13.7	14.7	15.2	14.3	15.3
Gluten %	12.2	13.0	11.8	12.6	12.8	13.6	12.9	13.7
Manuel Gluten Judgement	6.2	6.9	6.9	6.5	7.0	7.0	7.2	6.9
Alveograph W P/L	242 1.73	274 1.34	357 3.0	368 2.2	297 1.86	348 1.71	594 4.4	452 1.8
Yellow Index "b"	30.3	29.4	28.2	28.5	25.2	24	23.2	23.4

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

## EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Western Plant Breeders, Inc.	PH888-219	Mohawk
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
8111 Timberline Drive Bozeman, MT 59715	(406) 587-1218	(406) 586-8247
	7. PVPO NUMBER	
	9800020	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.  YES  NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?  YES  NO  
If no, give name of country

10. Is the applicant the original owner?  YES  NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

YES  NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

YES  NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

### PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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